

California Regional Water Quality Control Board  
Santa Ana Region

ORDER NO. 89-70

Waste Discharge Requirements  
for the  
San Bernardino County  
Solid Waste Management Department  
Fontana Sanitary Landfill  
San Bernardino County

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), finds that:

1. The San Bernardino County Solid Waste Management Department (hereinafter discharger) has operated the Fontana Sanitary Landfill since 1958.
2. On April 10, 1981 the Regional Board revised waste discharge requirements, Order No. 71-13, for the landfill operations at this location. This facility is currently regulated under waste discharge requirements, Order No. 81-76.
3. Order No. 81-76 is being updated to reflect the most recent Water Quality Control Plan and to comply with the current requirements in Subchapter 15, Chapter 3, Title 23 of the California Code of Regulations (hereinafter Subchapter 15) which became effective on November 27, 1984.
4. This facility is located in a portion of Section 29, T1N, R5W, SBB&M, as shown on Attachment A which is hereby made a part of this order.
5. Under the waste classification system in Subchapter 15, wastes disposed at this site are classified as Class III (Former Class II-2) nonhazardous solid wastes. Non-hazardous solid wastes are those wastes consisting of or containing chemically or biologically decomposable materials that do not contain toxic substances and are not capable of significantly impairing the quality of waters of the State.

6. The landfill has a design capacity of six million cubic yards, of which approximately 0.5 million cubic yards remained in 1987. The landfill receives an average of 178,000 cubic yards of waste each year. At this disposal rate, the landfill has a remaining life of approximately 3 years, or until the year 1990. The approximate composition of the waste is 70 percent household, commercial and other decomposable waste and 30 percent non-water soluble and non-decomposable inert solids, such as concrete. Approximately 2.4 million gallons of septage were discharged at the four septage drying areas each year. Once the septage dried to a solids content greater than 50 percent, it was disposed of at the landfill. The septage ponds are no longer in existence.
7. To comply with the requirements of Article 5, Section 2510 (d) of Subchapter 15, the discharger submitted, on December 1987, a complete Technical Report detailing ground water monitoring programs and compliance schedules at this site.
8. The landfill is located 2.5 miles southeast of the San Gabriel Mountains and about 6 miles southwest of the San Bernardino Mountains on a broad alluvial fan extending radially from the mouth of Lytle Creek Canyon, 3 miles north of the site. The landfill is underlain to a depth of over 320 feet by fine to coarse grained, unconsolidated sands, gravels and conglomerates derived from Lytle Creek. The region in which the landfill is located has been highly faulted by north to northwest-striking faults related to the San Andreas and San Jacinto fault zones and east-striking faults related to the Cucamonga fault. No faults are known to exist beneath the landfill, but ground-water barriers do exist within one and one-half miles northwest, southwest and northeast of the site. Ground water beneath the landfill flows southeast, generally parallel to the ground water barriers to the southwest and northeast.
9. The discharger has installed five ground water monitoring wells at the site, one upgradient (Well F-1) and three downgradient (Well F-2, F-2A, and F-3) and one upgradient of the septage disposal area (F-4), which may also serve as a downgradient well for a portion of the north side of the landfill. Ground water monitoring wells are intended to detect any migration of contaminants from the disposal site in accordance with Sections 2550, 2554, 2555, 2556, and 2595(g)(7) of Subchapter 15 and the California Water Code, Section 13273. The locations of these monitoring wells are shown on Attachment A.

10. Amendments to the California Water Code, Section 13273, required the State Water Resources Control Board to rank the approximately 1,900 active and inactive solid waste disposal sites throughout the state with respect to their potential to adversely impact ground or surface water through the release of hazardous substances. On December 19, 1985, the State Board adopted a list of 1,800 ranked sites. The list contained 12 ranks with 150 sites per rank. The Fontana Sanitary Landfill is one of the six sites operated by the discharger that are in the State Board's listing of Rank 1 landfill sites.
11. Compliance with the California Water Code, Section 13273, requires operators of ranked sites to prepare a Solid Waste Quality Assessment Test (SWAT) report. The purpose of the SWAT report is to provide a reliable indication of whether or not there is any leakage or migration of hazardous waste into surrounding soils or waters.
12. In December 1987, the discharger submitted a SWAT report pursuant to the California Water Code, Section 13273.
13. A Water Quality Control Plan was adopted by the Regional Board on May 13, 1983. The Plan identifies water quality objectives and beneficial uses for waters in the Santa Ana Region.
14. The requirements contained in this order are necessary to implement the Water Quality Control Plan.
15. The disposal site overlies the Rialto Ground Water Subbasin, the beneficial uses of which include:
  - a. Municipal and domestic supply,
  - b. Agricultural supply,
  - c. Industrial process supply, and
  - d. Industrial service supply.
16. The issuance of these updated waste discharge requirements involves the operations of an existing landfill site; therefore, it is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21100 et seq.), in accordance with Section 15301.
17. The Regional Board has notified the discharger and other interested agencies and persons of its intent to prescribe updated waste discharge requirements for the landfill operations and has provided them with an opportunity to submit their written views and recommendations.

18. The Regional Board, in a public meeting, heard and considered all comments pertaining to the landfill operations.

IT IS HEREBY ORDERED that the discharger shall comply with the following:

A. Discharge Specifications

1. The discharger shall implement the following measures in accordance with the applicable sections of Subchapter 15:
  - a. Establish and maintain permanent bench marks in California coordinates (or equivalent) to define the boundary and elevation of the approved landfill site. Those bench marks shall be certified by a licensed surveyor or a licensed civil engineer.
  - b. Protect and maintain containment structures to ensure their effectiveness.
  - c. Notify the Executive Officer of the Regional Board immediately of any slope failure occurring at the disposal site. Any failure which threatens the integrity of containment features of the disposal site shall be promptly corrected after approval of the method and schedule by the Executive Officer.
  - d. Design, construct, and maintain diversion and drainage facilities adequate to accommodate the anticipated volume of precipitation and peak flows from surface runoff from a 100 year-24 hour storm.
2. The discharge of wastes to property not owned or controlled by the discharger is prohibited.
3. The disposal of wastes that contain any substances in concentrations toxic to human, animal, or plant, in any manner that could allow these wastes to commingle with waters of the State, is prohibited.
4. The discharge of hazardous and/or designated wastes at this site is prohibited.

B. Provisions

1. Neither the treatment, the storage, nor the discharge of wastes shall cause a nuisance or pollution as defined in the California Water Code.
2. The discharger shall comply with the attached Monitoring and Reporting Program No. 89-70.
3. The discharger shall promptly report to the Regional Board any proposed change in the character, volume, location, or method of disposal of the wastes.
4. Periodic inspections shall be made of these operations to determine compliance with the discharge specifications and provisions of this order.
5. The discharger shall permit the Regional Board and other authorized representatives:
  - a. Entry upon the premises in which wastes are disposed, or in which any required records are kept;
  - b. Access to copy any records required to be kept under terms and conditions of this order;
  - c. Inspection of monitoring equipment or records; and
  - d. Sampling of ground water.
6. The operator shall maintain a copy of this order at the site so as to be available at all times to site operating personnel.
7. The discharger shall sample and analyze all monitoring wells in accordance with Section 2595(g)(7) and Section 2555 of Subchapter 15 on a quarterly basis, including the times of expected highest and lowest elevations of the ground water surface. By August 31, 1989, the discharger shall complete one year's quarterly sampling data from all background monitoring wells. The Executive Officer shall establish water quality protection standards for indicator parameters from these background data.
8. The discharger shall institute a detection monitoring program. Details of the program shall be submitted for approval by the Executive Officer of the Regional Board.

9. If waste constituents are detected at the downgradient monitoring wells in excess of the water quality protection standards established by the Executive Officer, the discharger shall institute a verification monitoring program in accordance with Sections 2555 and 2557 of Subchapter 15.
10. If verification monitoring establishes that any water quality protection standard has been exceeded at the downgradient monitoring wells, the discharger shall institute a corrective action program in accordance with Sections 2555 and 2558 of Subchapter 15.
11. Within 90 days after the adoption of these waste discharge requirements, the discharger shall submit, for approval of the Executive Officer, a Quality Assurance/Quality Control (QA/QC) program for ground water sampling.

~~12.~~ By November 30, 1989, the discharger shall submit a preliminary closure and post-closure maintenance plan and a closure financial plan to the Regional Board pursuant to Sections 2580 and 2597, Subchapter 15. This plan shall be prepared by or under the supervision of either a registered civil engineer or certified engineering geologist registered in the State of California. The method proposed to close the site and maintain protection of the quality of ground and surface waters shall comply with regulations contained in Article 8, Subchapter 15.


~~13.~~ The preliminary closure and post-closure maintenance plan submitted pursuant to Provision No. 12, above, shall be updated if there is a substantial change in operations. A final plan shall be submitted at least 180 days prior to beginning any partial or final closure activities, or at least 120 days prior to discontinuing the use of the site for waste treatment, storage, or disposal, whichever is greater. The final plan shall be prepared by or under the supervision of either a registered civil engineer or a certified engineering geologist registered in the State of California. The updating of the plan may be done by or under the supervision of the owner and/or operator of the waste disposal site.

14. The discharger shall notify the Regional Board in writing of any proposed change in ownership or responsibility for operation, closure, or post-closure maintenance of the disposal site. This notification shall be given prior to the effective date of the change and shall include a statement by the new discharger that operation, closure, and post-closure maintenance shall be in compliance with any existing waste discharge requirements and any revisions thereof.
15. The discharger shall notify the Executive Officer by telephone (714-782-4130) within 24 hours of any failure of facilities necessary to maintain compliance with requirements in this order. Within five days, the notification shall be submitted in writing to the Executive Officer.
16. The discharger shall submit a technical report for approval of the Executive Officer prior to initiating the usage of any daily cover materials, other than soil, for the disposal site. The technical report shall include the following:
  - a. A Quality Assurance/Quality Control program for testing, handling, and placement of the material;
  - b. The physical properties and chemical analyses of the proposed material;
  - c. The stability and suitability of the proposed material, which shall include short-term and long-term effects of the proposed material on quality of waters of the area; and
  - d. A tentative time schedule to begin such use.
17. The California Regional Water Quality Control Board, Santa Ana Region, hereby reserves the privilege of changing all or any portion of this order upon legal notice to all concerned parties and after all parties have been given an opportunity to be heard.
18. This order rescinds Order No. 81-76, the previous waste discharge requirements for landfill operations at this site.

Order No. 89-70 - continued  
Fontana Sanitary Landfill

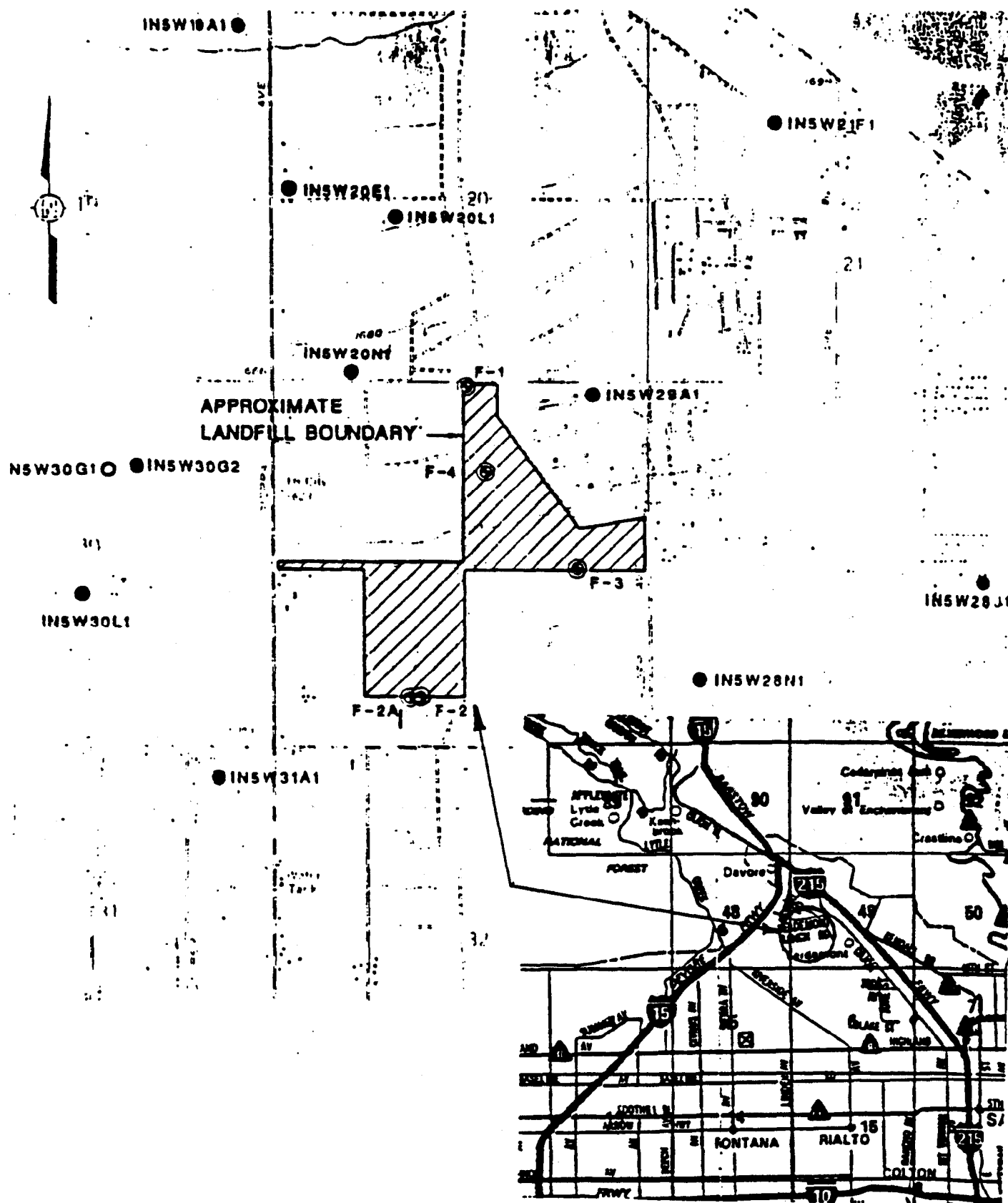
Page 8 of 13

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on July 14, 1989.

  
\_\_\_\_\_  
GERARD J. THIBEAULT  
Executive officer



**ATTACHMENT A**



California Regional Water Quality Control Board  
Santa Ana Region

Monitoring and Reporting Program No. 89-70  
for  
San Bernardino County Solid Waste Management Department  
Fontana Landfill  
San Bernardino County

A. General Monitoring

1. A permanent daily log of the types of materials and the amount of each type of waste disposed of at the landfill site shall be maintained.
2. Diversion and drainage facilities shall be inspected each week and comments regarding the adequacy of these facilities shall be recorded in a permanent log.

B. Ground Water Monitoring

1. The discharger shall conduct the following programs in accordance with Article 5 and Section 2595(g)(7) of Subchapter 15.
  - a. These monitoring programs shall specifically follow Provisions No. 7, 8, 9, and 10 of Order No. 89-70.
  - b. Ground water levels in all monitoring wells shall be measured and recorded each month. During months when ground water samples are to be obtained, ground water levels of the wells must be measured before purging.
  - c. The volume of water purged and well recovery time shall be recorded.
2. The discharger shall sample all monitoring points on a quarterly basis. Collected water samples shall be analyzed for parameters indicated in Table A and Table B (copies of Tables attached) according to the following schedule:

B. Ground Water Monitoring - cont'd

2. (cont'd)

Table A: January - March  
July - September  
October - December

Tables A & B : April - June

3. All ground water samples shall be collected during the month of February, May, August, and November.
4. The discharger shall take the following precautions during ground water sampling:
  - a. Ground water monitoring wells shall be purged of at least three casing volumes of water or until the temperature, pH, and specific conductance are stable prior to sample collection.
  - b. Ground water samples shall be collected, according to the QA/QC program approved by the Executive Officer, using equipment, procedures and practices which minimize sample contamination.
  - c. Ground water collected shall be representative of the entire water column present in the well.
  - d. Water quality analyses shall be performed in accordance with the most recent edition of the Environmental Protection Agency's "Guidelines for Establishing Test Procedures for the Analysis of Pollutants," promulgated by EPA (40 CFR Part 136).
  - e. Sample containers, preservations, handling, and holding times shall conform with those in 40 CFR Part 136.
5. Revisions may be made under the direction of the Executive Officer at any time, and may include a reduction or increase in the number of parameters to be monitored and the frequency of monitoring.
6. All analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services.

C. Reporting

1. Quarterly reports shall be submitted to the Regional Board within 30 days following the monitoring period. The quarterly reports shall include the following:
  - a. A copy of the landfill log;
  - b. A copy of the diversion and drainage facilities inspection and evaluation log;
  - c. One copy each of the records on ground water levels, well purging volumes and well recovery times;
  - d. A copy of a geologic map of the site showing the locations of monitoring wells and ground water contours;
  - e. One copy each of the summary of the sampling procedures, a tabular summary of ground water sampling results, and the analytical results of ground water samples; and
  - f. A comprehensive discussion of field and laboratory QA/QC programs conducted, including results of field and travel blank sample analysis, laboratory recoveries of surrogate compounds and internal standards, and thorough field sampling documentation including chain of custody.
  - g. A description of any conditions of noncompliance for the above operations/activities, and a time schedule to bring the item(s) into full compliance with the requirements contained in this order. If there are any noncompliance items for which compliance cannot be achieved, the reason(s) for such noncompliance shall be provided.
2. The ground water quarterly monitoring report shall be submitted according to the following schedule:

Reporting Period

Report Due


January - February - March  
April - May - June  
July - August - September  
October - November - December

April 30  
July 30  
October 30  
January 30

3. The preliminary closure and post-closure maintenance plan is due by November 30, 1989.

4. Annually, a summary report of the monitoring program shall be submitted by the 30th day following the July-August-September monitoring period. The first annual summary report of the monitoring program is due by October 30, 1989. In addition to the information required under Quarterly Reports, 1., above, the annual reports shall include the following for the previous year:
  - a. Tabular and graphical summaries of ground water levels and ground water sampling results;
  - b. A brief summary on background water quality based on the analytical data obtained; and
  - c. Updated information on ground water systems or hydrogeology at the site.
5. All reports shall be signed by a responsible officer or duly authorized employee of the discharger and shall be submitted under penalty of perjury.

Ordered by

  
GERARD J. THIBEAULT  
Executive Officer

July 14, 1989